

SEQUENCE LISTING

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<120> Babesia canis vaccine

<130> Bccvirvaccine

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<170> PatentIn Ver. 2.1

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<211> 1135

<212> DNA

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1

5

10

gag aac cgt ccc acc ttt ggt gag acg ttt gat gtg atg agg gaa gct 158

Glu Asn Arg Pro Thr Phe Gly Glu Thr Phe Asp Val Met Arg Glu Ala

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Leu Leu Arg Val Lys Ser Ser Glu Arg Leu Ala Met Leu Arg Ala Leu

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35

40

gca gga atg tgc ggt cac cgc gtc ctt cct ggc act ggt gct tct gcg 254

Ala Gly Met Cys Gly His Arg Val Leu Pro Gly Thr Gly Ala Ser Ala

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60

ata gcg gca acg gta acc cca aag ggg gct tcg atg aag ctt aaa cca 302

Ile Ala Ala Thr Val Thr Pro Lys Gly Ala Ser Met Lys Leu Lys Pro

65

70

75

ccg cgt ccg cag tca acg aag tct ccg gag ctc agg gag ctg tca cgg 350

10087573-022800

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Lys Ile Arg Glu Met Asn Lys Thr Ile Ser Gln Glu Ser Ala Arg Val
      95                      100                      105

aac cac cgg ttg ccg gaa ggc cac cct ctc tta gag aag cgg gca gaa 446
Asn His Arg Leu Pro Glu Gly His Pro Leu Leu Glu Lys Arg Ala Glu
      110                      115                      120

tat ttt cgt cac ctt aga tct ctt aag agc caa gga gtc aat aga ctc 494
Tyr Phe Arg His Leu Arg Ser Leu Lys Ser Gln Gly Val Asn Arg Leu
      125                      130                      135                      140

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Ile

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agcgacggag tcgcatgaca acgtggaatc ttagaccacg ccggacgggt tatccgtcaa 670

atggactctt ggcagttacg gaactcctga tctcgattta tagatcaaac ttctacacct 730

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tactcctatc cggttacctc cagctatata gtgcactgca ctcagttgga aggtctgtat 850

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ccgggtcctt cggggcccg gccagtttcg actggtgtag gtttgcccta ctagagtact 1030

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Lys Ser Ser Glu Arg Leu Ala Met Leu Arg Ala Leu Ala Gly Met Cys
35 40 45

Gly His Arg Val Leu Pro Gly Thr Gly Ala Ser Ala Ile Ala Ala Thr
50 55 60

Val Thr Pro Lys Gly Ala Ser Met Lys Leu Lys Pro Pro Arg Pro Gln
65 70 75 80

Ser Thr Lys Ser Pro Glu Leu Arg Glu Leu Ser Arg Lys Ile Arg Glu
85 90 95

Met Asn Lys Thr Ile Ser Gln Glu Ser Ala Arg Val Asn His Arg Leu
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Glu Asn Arg Pro Thr Phe Gly Glu Thr Phe Asp Val Met Arg Glu Ala
15 20 25

ttg ctt cgt gta aag tcc tct gaa cgc ttg gca atg ctc aga gcg ctt 206
Leu Leu Arg Val Lys Ser Ser Glu Arg Leu Ala Met Leu Arg Ala Leu

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Ile Ala Ala Thr Val Thr Pro Lys Gly Ala Ser Met Lys Leu Lys Pro			
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Pro Arg Pro Gln Ser Thr Lys Ser Pro Glu Leu Arg Glu Leu Ser Arg			
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Tyr Phe Val Thr Leu Asp Leu Leu Arg Ala Lys Glu Ser Ile Asp Ser			
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Ser Lys Lys Ala Leu Arg Arg Tyr Arg Ala Ser Met Arg Asn Thr Asn			
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cga cta gtg cac aat aga cga cca gtt cta cca aag gta gag cct gac	590		
Arg Leu Val His Asn Arg Arg Pro Val Leu Pro Lys Val Glu Pro Asp			
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Ser Asn Leu Pro Phe Gly Gln Arg Arg Ser Arg Met Thr Thr Trp Asn			
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ctt aga cca cgc ccg acg ggt tat ccg tca aat ggt act ttg gca gtt	686		
Leu Arg Pro Arg Arg Thr Gly Tyr Pro Ser Asn Gly Thr Leu Ala Val			
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Thr Glu Leu Leu Ile Ser Ile Tyr Arg Ser Asn Phe Tyr Thr Leu Lys			
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225	230	235	
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Ala Leu Leu Leu Leu Ser Gly Tyr Leu Gln Leu Tyr Arg Ala Leu His			
240	245	250	
tca gtt gga agg tct gta ttc gta gaa tac tgc aaa acc agg ata tgc			878
Ser Val Gly Arg Ser Val Phe Val Glu Tyr Cys Lys Thr Arg Ile Cys			
255	260	265	
gtc gag gca cgc ctc acc gga cta cgt ccg agg gtg acc cta acg ggc			926
Val Glu Ala Arg Leu Thr Gly Leu Arg Pro Arg Val Thr Leu Thr Gly			
270	275	280	
tgc tgaactaggt tcagccagcg cttcctgtga gtatgtcatt ccgggtcctt			979
Cys			
285			
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Lys Ser Ser Glu Arg Leu Ala Met Leu Arg Ala Leu Ala Gly Met Cys			
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Gly His Arg Val Leu Pro Gly Thr Gly Ala Ser Ala Ile Ala Ala Thr			
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Val Thr Pro Lys Gly Ala Ser Met Lys Leu Lys Pro Pro Arg Pro Gln			
65	70	75	80
Ser Thr Lys Ser Pro Glu Leu Arg Glu Leu Ser Arg Lys Ile Arg Glu			
85	90	95	

Met Asn Lys Thr Ile Ser Gln Glu Ser Ala Arg Val Asn His Arg Leu
100 105 110

Pro Glu Gly His Pro Leu Leu Glu Lys Arg Ala Glu Tyr Phe Val Thr
115 120 125

Leu Asp Leu Leu Arg Ala Lys Glu Ser Ile Asp Ser Ser Lys Lys Ala
130 135 140

Leu Arg Arg Tyr Arg Ala Ser Met Arg Asn Thr Asn Arg Leu Val His
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Asn Arg Arg Pro Val Leu Pro Lys Val Glu Pro Asp Ser Asn Leu Pro
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Phe Gly Gln Arg Arg Ser Arg Met Thr Thr Trp Asn Leu Arg Pro Arg
180 185 190

Arg Thr Gly Tyr Pro Ser Asn Gly Thr Leu Ala Val Thr Glu Leu Leu
195 200 205

Ile Ser Ile Tyr Arg Ser Asn Phe Tyr Thr Leu Lys Val Val Glu Glu
210 215 220

Gly Arg Cys Thr Cys Cys Asn Thr His Lys Glu Gln Ala Leu Leu Leu
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Leu Ser Gly Tyr Leu Gln Leu Tyr Arg Ala Leu His Ser Val Gly Arg
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